APRIL-SEPTEMBER 2015 TRAINING SCHEDULE

The Office of Trust Services Geospatial Support (OTSGS) function provides training to BIA employees and employees of federally recognized Tribes. There is no tuition cost for this training. Training equipment and training materials are provided by the OTSGS. Expenses for transportation, hotel accommodations, and meals are the responsibility of the participant's organization. Training courses are available at the OTSGS Training Facility in Lakewood, Colorado and at various field locations per request and availability. The training schedule is subject to change at the discretion of the BIA.

Level	Region / Field Location	Course	Date
Beg.	To Bridge A Gap Conference Special Offering** Wyandotte, OK	Introduction to GPS	Mar 30, 2015
Beg.	University of Alaska - Fairbanks Anchorage, Alaska	Principles of GIS	Apr 21-24, 2015
Beg.	Pyramid Lake Paiute Tribe Nixon, NV	Principles of GIS	May 18-21, 2015
Beg.	National Indian Timber Symposium Special Offering** North Bend, OR	Editing in ArcGIS	Jun 8, 2015
Beg.	OTSGS Lakewood Training Facility Lakewood, CO	Principles of GIS	Jun 22-25, 2015
Beg.	OTSGS Lakewood Training Facility Lakewood, CO	Principles of GIS	Jul 6-9, 2015
Beg.	OTSGS Lakewood Training Facility Lakewood, CO	Principles of GIS	Aug 10-13, 2015
Int.	OTSGS Lakewood Training Facility Lakewood, CO	Introduction to Cartography*	Sep 14-17, 2015

All courses are taught in ArcGIS version 10.2.2 and ArcPad 10.2 unless otherwise indicated.

Due to the high demand for training, please register early to help ensure placement in the requested course. To register for a course, email or fax a completed and signed registration form to OTSGS@bia.gov.

Please visit http://www.bia.gov/WhatWeDo/ServiceOverview/Geospatial/index.htm or contact the OTSGS Help Desk for a copy of the latest training brochure which includes a registration form, course descriptions, cancellation and absence policy, priority information, and other training policies.

BUREAU OF INDIAN AFFAIRS OFFICE OF TRUST SERVICES GEOSPATIAL SUPPORT

13922 Denver West Parkway, Building 54, Suite 300, Lakewood, CO 80401

Toll Free: 1-877-293-9494

Fax: 303-231-5229

Email: OTSGS@bia.gov

http://bia.gov/WhatWeDo/ServiceOverview/Geospatial/

Principles of GIS, October 2014 OTSGS Training Facility in Lakewood, CO

39.744957, -105.154573





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OTSGSnew

In this issue:

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Lonnie Wright from the Cheyenne River Agency completed Principles of GIS in October 2014. All students meeting the OTSGS training requirements receive an OTSGS Certificate of Completion at the end of each course

LAND BUY BACK TRAINING

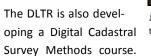
Due to the land consolidation provision in the Cobell Settlement Agreement, the Secretary of the Interior established the Land Buy Back Program (LBBP). A \$1.9 Billion Trust Land Consolidation Fund was provided by the settlement to purchase and consolidate fractional land interests across Indian Country. There are 150 unique reservations that have significant fractional interests. The Buy Back Program allows individual interested owners to receive payments for voluntarily selling their lands. These lands that are purchased are restored to the tribes and lands and are placed into trust for tribal communities. The OTSGS is currently working with the Division

of Land Title and Records (DLTR) and the LBBP

to develop trainings that will assist with understanding methods used to map trust land tracts for the LBBP.

The first course will be intended to address

questions by the tribes and others as to where the data came from to produce the maps, how the data was processed, and how the data can be used.





tor for the Land Buy Back

This course is planned to be a two day course that would cover PLSS usage and history, BLM's GCDB and CadNSDI, BIA's Land Title Mapper, Metes and Bounds (Water Boundaries), Indian Land Law, Legal Land Descriptions,

> and Field Proofing Methods. This will be a course that can assist tribes in understanding the basis for both the LBB and BIA trust tract and boundary mapping methods.

(Continued on Page 2)

DATA DEPOT: NAIP IMAGERY

The National Agriculture Imagery Program (NAIP), which is administered by the USDA's Farm Service Agency, acquires 1-meter resolution, 4 band (red, green, blue, and infrared), aerial imagery during the agricultural growing seasons in the continental U.S. The imagery is made available within one year of acquisition.

NAIP imagery is available in multiple formats and can be accessed different ways, depending on intended usage:

1) For visual backdrop and geographic orientation purposes, there is a Web Mapping Service (WMS) that hosts state mosaicked NAIP imagery, which can be loaded directly into a map mxd, for free, by following the instructions found here (Read the entire document to assure proper usage): http://www.fsa.usda.gov/Internet/FSA_File/ 2013 apfo webservice 10x.pdf. The state mosaicked imagery can be clipped and stored locally, but has been highly compressed, meaning it retains less detail than the original data, and it does not contain the infrared band.

2) Basic analysis, as well as supervised and unsupervised classifications, that

imitate visual detection methods can be done using NAIP's Compressed County Mosaics (CCM's), which can be

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By David O'Donnell

downloaded by county, for free, through the USDA Geospatial Data Gateway at http://datagateway.nrcs.usda.gov/. The CCM's have been moderately compressed and do not contain the infrared band.

PLSS Map, BLM, 1988

3) For scientific analysis or purposes that require scientific validity, NAIP provides imagery tiles, which include the infrared band, and are minimally compressed and processed from the raw data, making the tiles the most accurate and detailed data product. The tiles match the Digital Ortho Quarter Quad (DOQQ) grid. Upon request, the BIA OTSGS Help Desk, if provided with a properly sized and formatted external hard drive, can load requested DOQQ's NAIP imagery tiles and ship the hard drive to the requestor.



^{*} Indicates course has a prerequisite.

^{**}Indicates this is a special course offered in conjunction with the GIS Conference. This course may require conference registration and attendance. Course may be subject to policies other than the OTSGS policies. Contact the OTSGS Registrar at 1-877-293-9494 or OTSGS@bia.gov for each conference's registration information or who to contact in order to register.

NEWEST STAFF MEMBER: DJ

Devin "DJ" Johnson is the newest member to the OTSGS team with an extensive background in military intelligence, geospatial development, and remote sensing analysis. Having worked



in the scientific community, federal civilian sector, and the military, Devin has worked collaboratively with clients including astronomers, meteorologists, engineers, and the U.S. Army and Air Force. He is responsible for assessing needs, completing geospatial analysis, and creating cartographic outputs on request for various BIA tribal entities.

Devin holds a Bachelor's of Science in Geographic Information Sciences from the University of Maryland and a Masters in Geographic Information Technology along with a certificate in Remote Sensing from Northeastern University.

Land Buy Back Training

(Continued from Page 1)

These courses are still in development and are not expected to be available until June 2015. Until that time if you have any guestions about the LBBP, additional information may be found at http://www.doi.gov/buy

backprogram/index.cfm, or you

Public Land Survey System (PLSS)

may call 1-888-678-6836. If you have any questions about the LBBP mapping methods or Land Buy Back Training, you may call the OTSGS help desk at 1-877-293-9494.

CURRENT STAFF RECAP

Chad Wallace

GIS Coordinator/Federal Manager for the OTSGS

Shane Willard, GISP

Contract Lead/Geospatial Program Manager

Donna Offerson

ELA Coordinator/Technical Support Administrator

Lindsay Eaves

Geospatial Support Coordinator

Rod Kuhns

GIS Applications Architect David O'Donnell

GIS Analyst

DJ GIS Analyst

Bradford Tatham, GISP

Senior Geospatial Trainer

Katie Lewers

Geospatial Trainer

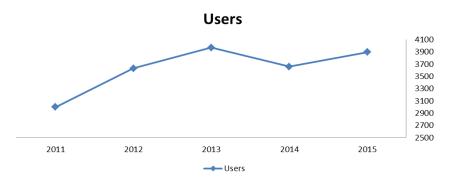
Jeffrey Metius

DLTR Trainer

ELA PROGRAM GROWTH

Since the OTSGS took over the management of the ELA program in 2011, it has been tracking the number of ArcGIS users who are a part of the Enterprise License Agreement (ELA). The graph below represents the total increase from the beginning of the program in 2011 until now. The graph shows a slight decrease in 2014; however, this was not due to lower participation in the Program. Rather, several organizations had not completed their 2013 Reconciliation. Without a proper response to our annual reconciliation users are still able to use the software, but are not considered in the ELA count as we are unable to determine if users are utilizing ELA services.

The OTSGS always asks for the ELA Application Form to be completed so that the BIA may efficiently provide more services to the participants of the ELA program. The user base has been historically increasing at about 10-15% average per year. As a result the BIA expects an increase in users in the years to come as more and more Native organizations to embrace the usefulness of GIS and take advantage of the OTSGS's services to assist them in reaching their goals.



ARCMAP TIPS AND TRICKS

By Brad Tatham and David O'Donnell

Getting the Geodatabase XML with or without ! Need to bring an Excel spreadsheet indata

Say, for example, you have a need for timber harvest data. The First, clean-up your spreadsheet so that USDA Forest Service GIS site provides XML (Geodatabase) files that

you could use. It has both the schema (database layout) and a polygon feature. Selecting the "Timber Harvest" file downloads and extracts the data and also creates a new geodatabase to add the data to. Here is the trick:

Feature Class (single)... Feature Class (multiple)... Table (single)... Table (multiple)... Raster Datasets... XML Workspace Document...

don't extract the data, instead create a new geodatabase (gdb), right click the gdb you just created, in ArcCatalog, click Import and change the file type from XML to ZIP. It works like a charm!

USDA FS XMLs can be found at http://data.fs.usda.gov/geodata/ edw/datasets.php.

to ArcMap?

there are no spaces or symbols in the column names. Format the cell type for each column to match the data type (e.g. date, number, text). Column names must be 10 characters or less if they are going to be in a shapefile, but a feature class in a geodatabase can have a longer field name. Name your spreadsheet tab at the bottom descriptively. Save as an .xls or .xlsx and then run the tool "Excel to Table".

The output is a .dbf that you can then work with in ArcMap to create points from coordinates or join to existing spatial data. Conversely, you can navigate to a properly cleaned and formatted Excel spreadsheet in ArcCatalog, select the sheet, and export to .dbf.

ELA TRAINING COURSES

By Donna Offerson



The BIA's Enterprise Licensing Agreement (ELA) Program provides ArcGIS training and software to BIA employees and employees of federally recognized Tribes. Participants in the DOI/BIA's ELA Program have access to several on-line GIS courses which are provided at no cost through the ELA with ESRI.

These online courses are listed on pages 4 through 6 of the ELA Product List located at http://www.bia.gov/ WhatWeDo/ServiceOverview/Geospatial/index.htm.

To order any of these online courses, contact the OTSGS geospatial help desk at 1-877-293-9494 and request an Order Form. Send the completed Order Form to otsgs@bia.gov, or you may fax it to 303-231-5229. There is no limit to the number of classes you may take or how many orders you submit; however, you may want to order a small amount at a time. Once you are given an authorization code, you will have a year to complete the course as the authorization codes will expire at that time.

ELA COURSE HIGHLIGHT

AVC-32126 Learning ArcGIS By Brad Tatham

Desktop (for ArcGIS 10) is an older ESRI web course but it is a good introductory course to GIS. Most of the courses on the ELA list are 1 - 3 hours in length but this is a full three day

Audience: Individuals who are new to ArcGIS Desktop software, new to GIS, or tribal and BIA employees that are going to take our introductory Principles of GIS (4 day) course.

Description: This course introduces fundamental concepts of GIS and the major functionality contained within ArcGIS Desktop software. In the course exercises, you will follow the GIS analytical process and work with a variety of tools to solve realistic problems.

Once you have submitted your Order Form to OTSGS, you will need to set up a global account by going to: http://www.esri.com/training/ main. ESRI also has several free online courses available once you have set up your global account.

To enroll in any of the ELA Program's on-line classes, you must be listed as an authorized user on your organization's ELA account. If your organization is not an ELA Participant and is interested in becoming one, go to http://www.bia.gov/WhatWeDo/ServiceOverview/Geospatial/ index.htm, complete an OTSGS ELA Application Form, and submit it to otsgs@bia.gov, or you may fax it to 303-231-5229.

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